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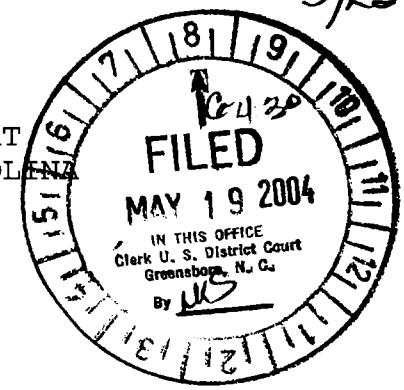

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

LOIS PAXTON SHAVER,	)	
	)	
Plaintiff,	)	
	)	
v.	)	CIVIL NO. 1:02CV00671
	)	
UNITED STATES OF AMERICA,	)	
	)	
Defendant.	)	

MEMORANDUM OPINION

BULLOCK, District Judge

On August 15, 2002, Lois Paxton Shaver ("Plaintiff") filed this civil action against the United States of America ("Defendant") pursuant to the Federal Tort Claims Act, 28 U.S.C. §§ 2671 et seq. ("the FTCA"), for personal injuries arising out of an automobile accident between Plaintiff and James Stephen Tinker, a recruiter for the Department of the Army. This matter is before the court following a bench trial on the issues of causation and damages, which concluded on February 5, 2004. At trial, both parties presented witnesses and exhibits, as well as deposition transcripts, for the court's consideration. After careful review of the parties' exhibits and deposition transcripts, and after careful evaluation of the testimony of each witness and consideration of the witness's interest, if any,

in the outcome of the case, each witness's demeanor and manner of testifying, and each witness's opportunity to acquire knowledge of the facts about which he or she testified, as well as the extent to which other credible evidence either supported or contradicted each witness's testimony, the court makes the following findings of fact and conclusions of law pursuant to Federal Rule of Civil Procedure 52(a). Based on these findings of fact and conclusions of law, the court will enter judgment for Plaintiff.

FINDINGS OF FACT

A. Parties and Procedural Background

1. Plaintiff is a citizen and resident of Cabarrus County, North Carolina.

2. Defendant is the government of the United States of America.

3. On October 23, 2001, Plaintiff presented a complete and proper administrative claim in writing to the appropriate federal agency for determination, as required by 28 U.S.C. § 2675(a). Specifically, Plaintiff submitted to the Department of the Army, Staff Judge Advocates Office, XVIII Airborne at Fort Bragg, North Carolina, an executed Standard Form 95 and a claim for money damages in the amount of $206,200.00 for personal injury, as

required by 28 C.F.R. § 14.2(a). The Department of the Army effectively denied Plaintiff's claim by failing to make a final disposition of Plaintiff's claim within six months after Plaintiff filed her claim. See 28 U.S.C. § 2675(a) ("The failure of an agency to make final disposition of a claim within six months after it is filed shall, at the option of the claimant any time thereafter, be deemed a final denial of the claim for purposes of this section.").

4. On August 15, 2002, Plaintiff filed a complaint against Defendant in this court pursuant to the FTCA. Plaintiff's complaint stated a single claim for relief against Defendant on the basis of negligence and alleged that "Plaintiff has been damaged on account of the negligence of the Defendant by reason of her personal injuries, including her permanent injuries, pain and suffering, [and] medical expenses in a sum in excess of $75,000 in compensatory damages." (Compl., ¶ XVI.)

5. On October 17, 2002, Defendant filed an answer to Plaintiff's complaint in which Defendant denied the material allegations contained in Plaintiff's complaint and asserted eight affirmative defenses to the allegations contained in Plaintiff's complaint, including the affirmative defense of contributory negligence.

6. On August 26, 2003, Plaintiff filed a motion for summary judgment on the issues of liability and contributory negligence.

The court subsequently denied Plaintiff's motion for summary judgment in a written order entered November 21, 2003.

B. Factual Background

7. Plaintiff is a fifty-four-year-old female who has a history of health problems, which include fibromyalgia, hypertension, anxiety, and depression.

8. On May 5, 1987, Dr. Robert H. Beaver of Northeast Orthopedics began treating Plaintiff for a work-related back injury.

9. On September 4, 1991, the Social Security Administration determined that Plaintiff qualified as totally disabled and that Plaintiff was eligible to receive social security disability benefits because of her work-related back injury. Plaintiff has received social security disability benefits continuously since September 4, 1991.

10. On January 11, 1994, Plaintiff presented to Northeast Orthopedics with complaints of back pain and leg pain. According to Plaintiff's medical records from Northeast Orthopedics dated January 11, 1994, which Defendant submitted as an exhibit at trial, Dr. Beaver examined Plaintiff and injected DepoMedrol and Xylocaine into Plaintiff's left SI joint posteriorly. (Def.'s Exs. B and Q.) DepoMedrol is an intramuscular steroid used to

treat inflammation and to relieve pain. Xylocaine is a local anesthetic.

11. On February 3, 1994, Plaintiff contacted Dr. Beaver because she had not experienced significant relief from her back pain and leg pain. According to Plaintiff's medical records from Northeast Orthopedics dated February 3, 1994, which Defendant submitted as an exhibit at trial, Dr. Beaver spoke with Plaintiff and prescribed a Medrol Dosepak to treat Plaintiff's back pain and leg pain. (Id.) A Medrol Dosepak is an oral steroid used to treat inflammation and to relieve pain.

12. On March 3, 1994, Plaintiff presented to Northeast Orthopedics with complaints of shoulder pain. According to Plaintiff's medical records from Northeast Orthopedics dated March 3, 1994, which Defendant submitted as an exhibit at trial, Dr. Beaver examined Plaintiff and injected DepoMedrol into Plaintiff's right shoulder. (Id.)

13. From May 12, 1994, to December 5, 1996, Dr. R. Gordon Senter treated Plaintiff for shoulder pain, back pain, hip pain, and leg pain associated with fibromyalgia. According to Plaintiff's medical records from Dr. Senter's office from May 12, 1994, to December 5, 1996, which Defendant submitted as an exhibit at trial, Dr. Senter treated Plaintiff's back pain and leg pain with multiple intramuscular steroid injections. (Def.'s Exs. C and Q.)

14. On February 3, 1997, Plaintiff presented to Dr. Senter's office with complaints of back pain, leg pain, foot pain, depression, anxiety, and panic attacks. According to Plaintiff's medical records from Dr. Senter's office dated February 3, 1997, which Defendant submitted as an exhibit at trial, Dr. Senter conducted a physical examination of Plaintiff and observed that Plaintiff's "knees [were] a little tender." (Def.'s Ex. C.)

15. Plaintiff's medical records from Dr. Senter's office dated February 3, 1997, show that Dr. Senter prescribed a Medrol Dosepak to "knock out her pain." (Id.)

16. On February 14, 1997, Plaintiff presented to Dr. Senter's office with complaints of physical pain, including pain while walking, depression, anxiety, and panic attacks. According to Plaintiff's medical records from Dr. Senter's office dated February 14, 1997, which Defendant submitted as an exhibit at trial, Dr. Senter's assistant conducted a physical examination of Plaintiff and observed that Plaintiff's "knees [were] a little achy and sore." (Id.)

17. Plaintiff's medical records from Dr. Senter's office dated February 14, 1997, show that Dr. Senter injected Dalalone and Xylocaine into Plaintiff's left greater trochanteric bursa and into several trigger points in Plaintiff's neck and back.

(Id.) Dalalone is an intramuscular steroid used to treat inflammation and to relieve pain.

18. On May 19, 1997, Plaintiff presented to Dr. Senter's office with complaints of physical pain, including pain in both knees, depression, anxiety, and panic attacks. According to Plaintiff's medical records from Dr. Senter's office dated May 19, 1997, which Defendant submitted as an exhibit at trial, Dr. Senter's assistant conducted a physical examination of Plaintiff and observed that "[Plaintiff] is very tender and sore over both anserine bursa[e] with some mild tenderness at the joint line but most of the tenderness is in the bursa[e] and she complains of more pain in the lower area of the knee [with] walking, than across the joint line." (Id.)

19. Plaintiff's medical records from Dr. Senter's office show that on May 19, 1997, Dr. Senter injected Dalalone and Xylocaine into Plaintiff's knees at the bursa and into several trigger points in Plaintiff's neck and back. (Id.)

20. On June 5, 1997, Plaintiff presented to Mount Pleasant Family Physicians ("Mount Pleasant") with complaints of knee pain. According to Plaintiff's medical records from Mount Pleasant dated June 5, 1997, which Defendant submitted as an exhibit at trial, Plaintiff told physicians at Mount Pleasant that her right knee had bothered her for the past two months and that "it ha[d] been really painful over the past [one and

one-half] weeks." (Def.'s Ex. D.) Plaintiff's medical records from Mount Pleasant show that Plaintiff also told physicians at Mount Pleasant that she had fallen on her right knee one and one-half weeks earlier, and since that time "she ha[d] felt it popping and ha[d] been unable to put much weight on it." (Id.)

21. On June 5, 1997, physicians at Mount Pleasant took an x-ray of Plaintiff's right knee. According to an evaluation of the x-ray of Plaintiff's right knee contained in Plaintiff's medical records from Mount Pleasant, the x-ray showed the presence of degenerative disease, "a questionable bone spur on the tibia protruding into the joint space," and "[a] narrowing of the lateral joint space and degenerative disease." (Id.)

22. On June 17, 1997, Plaintiff presented to Dr. Senter's office with complaints of back pain and knee pain. According to Plaintiff's medical records from Dr. Senter's office dated June 17, 1997, which Defendant submitted as an exhibit at trial, Dr. Senter observed that Plaintiff had "some mild tenderness of the [right] knee joint but she [was] exquisitely tender over the anserine bursa." (Def.'s Ex. C.) Plaintiff's medical records from Dr. Senter's office also show that Dr. Senter noted Plaintiff was "also tender over the left knee which hurts some, but not as bad as the right one." (Id.)

23. Plaintiff's medical records from Dr. Senter's office show that on June 17, 1997, Dr. Senter diagnosed Plaintiff with

anserine bursitis and decided to continue Plaintiff on a treatment program of anti-inflammatory medications. (Id.) Plaintiff's medical records from Dr. Senter's office also show that on June 17, 1997, Dr. Senter injected Dalalone and Xylocaine into Plaintiff's right anserine bursa and into several trigger points in Plaintiff's lower back. (Id.)

24. Plaintiff's medical records from Dr. Senter's office dated June 17, 1999, also contain the following evaluation of the x-rays of Plaintiff's right knee, which were taken by physicians at Mount Pleasant on June 5, 1997:

> [Plaintiff] went to Mt. Pleasant Family Physicians and had the right knee x-rayed on June 5. She was told that she had bone on bone involvement of that knee. Fortunately, she brings the x-rays with her and I think because of the projection the reading is a little misleading. If you look at what the actual joint spaces are they are perfectly normal. There appears to be some narrowing of the patella femoral joint but because of the angle that the x-ray was taken I think there is no narrowing of any of the joints. There are some tiny little sclerotic areas on the lateral aspect of the knee and I am not sure whether they are free in the joint or in the bone but I don't think they are significant. There is really no significant spurring. In fact, I would probably read this as a negative x-ray.

(Id.)

25. On August 28, 1998, Plaintiff presented to Dr. Senter's office with complaints of hip pain, back pain, and knee pain. According to Plaintiff's medical records from Dr. Senter's office dated August 28, 1998, which Defendant submitted as an exhibit at

trial, Plaintiff told Dr. Senter that her knees began hurting after she worked on removing carpet at her mother's house.

26. Plaintiff's medical records from Dr. Senter's office show that on August 28, 1998, Dr. Senter concluded that Plaintiff's knee pain was related to the work Plaintiff had performed at her mother's house and gave Plaintiff Toradol to clear up her knee pain. (Id.) Toradol is a non-steroidal anti-inflammatory drug used to treat pain.

27. Plaintiff's medical records from Dr. Senter's office also show that on August 28, 1998, Dr. Senter injected Dalalone and Xylocaine into Plaintiff's left greater trochanteric bursa and into trigger points in Plaintiff's back and buttocks. (Id.)

28. On April 12, 1999, Plaintiff presented to Dr. Senter's office with complaints of pain all over her body. According to Plaintiff's medical records from Dr. Senter's office dated April 12, 1999, which Defendant submitted as an exhibit at trial, Dr. Senter gave Plaintiff a prescription for Toradol and injected DepoMedrol and Xylocaine into Plaintiff's right subdeltoid bursa, into Plaintiff's greater trochanteric bursae, and into several trigger points in Plaintiff's back. (Id.)

29. On February 9, 2000, Plaintiff presented to Dr. Senter's office with complaints of pain related to fibromyalgia, including shoulder pain, chest pain, wrist pain, hip pain, and foot pain. According to Plaintiff's medical

records from Dr. Senter's office dated February 9, 2000, which Defendant submitted as an exhibit at trial, Dr. Senter gave Plaintiff Toradol for chest pain and injected DepoMedrol and Xylocaine into Plaintiff's left greater trochanteric bursa and into several trigger points in Plaintiff's back and buttocks. (Id.)

30. On April 4, 2000, Plaintiff was fifty years old and had a life expectancy of 29.3 years. See N.C. Gen. Stat. § 8-46.

31. On April 4, 2000, Defendant employed Tinker as a recruiter for the Department of the Army. On the morning of April 4, 2000, Tinker operated a 1998 Ford Contour owned by Defendant with Defendant's consent and permission, and Tinker operated the automobile at all times relevant to this action within the scope of his employment with Defendant.

32. At approximately 9:06 a.m. on April 4, 2000, Tinker failed to stop for a red traffic light at the intersection of Cabarrus Avenue and North Carolina State Highway 136 ("Highway 136") while traveling south on Highway 136 through the City of Concord in Cabarrus County, North Carolina. When Tinker ran the red traffic light and entered the intersection of Cabarrus Avenue and Highway 136, Tinker collided with Plaintiff's 1991 Nissan Sentra as Plaintiff traveled east on Cabarrus Avenue.

33. Tinker's automobile was traveling at an approximate speed of ten-to-fifteen miles per hour upon impact with

Plaintiff's automobile. Plaintiff's automobile was traveling at an approximate speed of five miles per hour upon impact with Tinker's automobile. During the collision, the front right bumper of Tinker's automobile struck the front left bumper and front left quarter panel of Plaintiff's automobile. The collision caused light to moderate damage to both automobiles.

34. When the automobile accident occurred, Plaintiff was wearing a seatbelt, and Plaintiff was sitting close to the steering wheel with her feet on the gas and brake pedals. The impact of the collision caused Plaintiff's feet to lift off the gas and brake pedals, which caused Plaintiff to strike her knees on either the steering column or the dashboard, or both.

35. Plaintiff declined medical treatment at the scene of the automobile accident.

36. Neither Tinker nor Officer J. C. Worth of the Concord Police Department, a police officer who arrived at the scene of the automobile accident, observed that Plaintiff had any apparent injuries from the automobile accident.

37. Approximately two hours after the automobile accident, Plaintiff began to experience back pain and knee pain. Plaintiff subsequently presented to the emergency room at Northeast Medical Center with complaints of bilateral knee pain, thoracic spine pain, and pain in her sternal area. According to emergency services records dated April 4, 2000, which both parties

submitted as exhibits at trial, Northeast Medical Center doctors diagnosed Plaintiff with a knee contusion and chest wall strain after x-rays taken of Plaintiff's chest and knees showed no fractures or disease and appeared normal. (Pl.'s Ex. 2; Def.'s Ex. F.)

38. The emergency services records dated April 4, 2000, do not describe the amount of trauma sustained by Plaintiff's right knee as a result of the automobile accident. (See id.)

39. Plaintiff testified at trial that the knee pain she experienced after the automobile accident was a different type of pain as compared to the knee pain she had experienced prior to the automobile accident during 1997 and 1998. According to Plaintiff's trial testimony, she felt like "something different [was] going on in [her] knee."

40. Plaintiff also testified at trial that her knee pain got very bad after the automobile accident and that her knee started swelling after the automobile accident.

41. On April 5, 2000, Plaintiff presented to Mount Pleasant with complaints of neck pain, back pain, and knee pain. According to Plaintiff's medical records from Mount Pleasant dated April 5, 2000, which both parties submitted as exhibits at trial, Dr. Danny West diagnosed Plaintiff with post motor vehicle accident musculoskeletal strain, osteoarthritis, and fibromyalgia, and gave Plaintiff a prescription for Celebrex 200

milligrams. (Pl.'s Ex. 3; Def.'s Ex. D.) Celebrex is a non-steroidal anti-inflammatory drug used to treat pain.

42. Plaintiff's medical records from Mount Pleasant show that on April 5, 2000, Plaintiff had a full range of motion in all of her lower extremity joints, including both knees and ankles. (Id.) Plaintiff's medical records from Mount Pleasant also show that on April 5, 2000, Plaintiff had "[m]ild tenderness to palpation diffusely around the medial and lateral aspects of the knees." (Id.)

43. On April 28, 2000, Plaintiff presented to Northeast Orthopedics for an appointment with Dr. Beaver. According to Plaintiff's medical records from Northeast Orthopedics dated April 28, 2000, which both parties submitted as exhibits at trial, Plaintiff told Dr. Beaver that during the automobile accident on April 4, 2000, "she banged her knees into the steering column of her vehicle and also twisted her back." (Pl.'s Ex. 4; Def.'s Ex. B.)

44. Plaintiff's medical records from Northeast Orthopedics show that on April 28, 2000, Dr. Beaver diagnosed Plaintiff with low back pain with sacroiliitis and contusion of the knees. (Id.)

45. Plaintiff's medical records from Northeast Orthopedics dated April 28, 2000, do not indicate the severity of the contusion or otherwise describe the contusion, which appeared on

Plaintiff's knees as an apparent result of the automobile accident. (See id.)

46. On May 10, 2000, Plaintiff presented to Mount Pleasant with complaints that she had exhausted her supply of Celebrex and that the pain in her right knee had recurred. According to Plaintiff's medical records from Mount Pleasant dated May 10, 2000, which Defendant submitted as an exhibit at trial, Plaintiff had no pain to palpation over her knees and "no intense pain to palpation over the medial or lateral aspect of the knees." (Def.'s Ex. D.)

47. Plaintiff's medical records from Mount Pleasant show that on May 10, 2000, Dr. West diagnosed Plaintiff with post motor vehicle accident musculoskeletal strain, osteoarthritis, and fibromyalgia, and renewed Plaintiff's prescription for Celebrex 200 milligrams. (Id.)

48. On June 25, 2000, Plaintiff contacted Cabarrus Family Medicine regarding her knee pain. According to a telephone note from Cabarrus Family Medicine dated June 25, 2000, which Defendant submitted as an exhibit at trial, Plaintiff spoke with a resident about the automobile accident and informed the resident that her knee pain had worsened. (Id.)

49. On June 26, 2000, Plaintiff presented to Mount Pleasant with complaints of recurrent right knee pain and difficulty walking. According to Plaintiff's medical records from Mount

Pleasant dated June 26, 2000, which both parties submitted as exhibits at trial, Plaintiff had recently consulted Dr. Beaver for the same knee pain, and the etiology of Plaintiff's knee pain remained unclear. (Pl.'s Ex. 3; Def.'s Ex. D.)

50. Plaintiff's medical records from Mount Pleasant show that on June 26, 2000, Plaintiff had a small amount of pain in the medial portion of her right knee in addition to a trace of lateral pain in her right knee. (Id.) Plaintiff's medical records from Mount Pleasant also show that on June 26, 2000, Dr. West diagnosed Plaintiff with possible fibromyalgia, right knee pain, and anxiety, and increased Plaintiff's prescription for Celebrex from 200 milligrams to 400 milligrams. (Id.)

51. On June 28, 2000, Plaintiff presented to Northeast Orthopedics with a complaint of persistent knee pain. According to Plaintiff's medical records from Northeast Orthopedics dated June 28, 2000, which both parties submitted as exhibits at trial, x-rays of Plaintiff's right knee failed to reveal any bony abnormality; however, Plaintiff had tenderness to palpation along the medial joint line of her right knee. (Pl.'s Ex. 4; Def.'s Ex. B.)

52. Plaintiff's medical records from Northeast Orthopedics show that on June 28, 2000, Dr. Beaver diagnosed Plaintiff with internal derangement of the right knee, injected Plaintiff's right knee with DepoMedrol and Xylocaine, and instructed

Plaintiff that a magnetic resonance imaging ("MRI") of her right knee might be necessary if her symptoms persisted for two more weeks. (Id.)

53. On July 12, 2000, Plaintiff contacted Northeast Orthopedics regarding her persistent right knee pain. According to Plaintiff's medical records from Northeast Orthopedics dated July 12, 2000, which both parties submitted as exhibits at trial, Dr. Beaver ordered Plaintiff to obtain an outpatient MRI on July 15, 2000. (Id.)

54. On July 19, 2000, Dr. Beaver contacted Plaintiff regarding her MRI results. According to Plaintiff's medical records from Northeast Orthopedics dated July 19, 2000, which both parties submitted as exhibits at trial, Dr. Beaver informed Plaintiff that her MRI results showed "[avascular necrosis] of the weight bearing surfaces of the medial femoral condyle in her knee." (Id.) Dr. Beaver also advised Plaintiff that a total knee replacement of her right knee would be necessary if her knee pain persisted. (Id.)

55. Avascular necrosis is synonymous with osteonecrosis, which refers to the death of osteocytes, or bone cells, due to a loss of blood supply to the bone.

56. On August 23, 2000, Dr. Beaver performed a total knee replacement of Plaintiff's right knee. A total knee replacement typically requires either revision or resurfacing, or both,

within fifteen-to-twenty years after the date of the original total knee replacement.

57. After Dr. Beaver performed the total knee replacement of Plaintiff's right knee, Plaintiff received in-patient physical therapy at Rowan Regional Medical Center. Plaintiff also received rehabilitation services at home from Northeast Medical Center. According to Plaintiff's trial testimony, Plaintiff experienced difficulty and pain during her physical therapy.

58. On November 9, 2000, Plaintiff presented to Northeast Orthopedics with a complaint of an injury to her right knee, which Plaintiff apparently sustained when she stepped in a hole. On April 12, 2001, Dr. Beaver performed a knee revision, during which he replaced the polyethylene spacer behind Plaintiff's right kneecap and tightened the ligaments in Plaintiff's right knee in order to give Plaintiff's right knee greater stability. According to the parties' pre-trial stipulations filed February 3, 2004, "Plaintiff is not seeking damages, including medical expenses, resulting from the fall that occurred on November 4, 2000, when she stepped in a hole and injured her right knee." (Trial Stipulations at 3.)

59. Both parties agree that Plaintiff's past and present medical expenses total $29,687.37.

60. Before the automobile accident on April 4, 2000, Plaintiff experienced some type of physical pain nearly every day

and had some difficulty walking. Plaintiff also did not work before the automobile accident and experienced difficulty when performing household chores before the automobile accident. Plaintiff also experienced stiffness and soreness in her muscles and joints from inactivity before the automobile accident.

61. Before the automobile accident on April 4, 2000, Plaintiff attended church and was able to stand and kneel with the congregation.

62. Since the automobile accident on April 4, 2000, Plaintiff continues to experience some type of physical pain nearly every day and still has some difficulty walking. Plaintiff has remained out of work since the automobile accident and still experiences difficulty when performing household chores. Plaintiff also continues to experience stiffness and soreness in her muscles and joints when she is inactive.

63. Since the automobile accident on April 4, 2000, Plaintiff still attends church; however, Plaintiff does not stand up and sit down with the congregation. Plaintiff also requires assistance when she walks to the front of the church and when she kneels to pray.

64. Plaintiff has a thirty-seven per cent (37%) permanent impairment of her right knee as a result of her osteonecrosis and total knee replacement based on the 4th Edition of the American

Medical Association's Guide to the Evaluation of Permanent Impairment.

65. Plaintiff has a thirty-four per cent (34%) permanent impairment of her right knee as a result of her osteonecrosis and total knee replacement based on the 5th Edition of the American Medical Association's Guide to the Evaluation of Permanent Impairment.

66. According to the parties' pre-trial stipulations filed February 3, 2004, "[P]laintiff is not seeking damages for lost wages." (Id.)

C. Expert Medical Testimony Presented at Trial

67. Dr. Beaver testified at trial as Plaintiff's treating physician and as an expert witness for Plaintiff. Defendant stipulated at trial that Dr. Beaver qualified as an expert in orthopedic surgery.

68. Dr. Beaver based his trial testimony on his knowledge, education, training, and experience, as well as his knowledge of Plaintiff, including Plaintiff's medical history, and his examinations of Plaintiff. (Tr. at 6.) At trial, Dr. Beaver stated all of his opinions in terms of a reasonable degree of medical certainty. (Id.)

69. Dr. Beaver testified that osteonecrosis in the knee is a "rare bird" and stated that the medical community does not

always definitively know what causes osteonecrosis in the knee. Dr. Beaver explained that many times the exact causative factor of osteonecrosis is a matter of speculation. (Id. at 21, 45.)

70. Dr. Beaver also testified that spontaneous osteonecrosis is a type of osteonecrosis that occurs in cases where there is no trauma involved and no steroid treatment involved, and medical science does not know why it occurs. (Id. at 45.) According to Dr. Beaver's testimony, spontaneous osteonecrosis is synonymous with idiopathic osteonecrosis. (Id.)

71. Dr. Beaver also testified that in his opinion it was more likely than not that the trauma to Plaintiff's right knee, which Plaintiff sustained during the automobile accident on April 4, 2000, caused osteonecrosis to develop in Plaintiff's right knee. (Id. at 7, 18-21.) Dr. Beaver did not classify Plaintiff's osteonecrosis as spontaneous or idiopathic.

72. Dr. Beaver also testified that a direct blow to the knee, which causes microvascular compromise of circulation to the bone, can cause to osteonecrosis in the knee because osteonecrosis of the knee occurs on a microvascular level. (Id. at 18.) On a microvascular level, osteonecrosis is neither visible to the naked eye nor visible on x-rays.

73. Dr. Beaver also testified that a bone fracture necessarily involves a breach of the vascular system of the bone. (Id. at 46.) According to Dr. Beaver's testimony, "[t]here are

instances that we have what are known as microfractures, where you have occult fractures that occur in bones that are not visible by [x]-ray, . . . [but] show up on an MRI." (Id. at 46-47.)

74. Dr. Beaver also testified that he did not have any information regarding amount of trauma Plaintiff sustained to her right knee as a result of the automobile accident when he reached his conclusion that trauma from the automobile accident more likely than not caused osteonecrosis to develop in Plaintiff's right knee. (Id. at 55.)

75. Dr. Beaver also testified that he was unaware of any medical study which had documented the amount of blunt trauma or force necessary to cause osteonecrosis. (Id. at 47.)

76. Dr. Beaver also testified that he used a differential diagnosis, or differential etiology, to reach his conclusion that the automobile accident more likely than not caused osteonecrosis to develop in Plaintiff's right knee. (See id. at 20, 57-58, 78-79.)

77. Dr. Beaver also testified that steroid or cortisone treatments, whether administered orally or intravenously, could cause osteonecrosis; however, Dr. Beaver explained that in his opinion Plaintiff's past cortisone or steroid treatments were not a causative factor related to the osteonecrosis in Plaintiff's right knee. (Id. at 29, 34.) According to Dr. Beaver's

testimony, the presentation of osteonecrosis in Plaintiff's right knee was inconsistent with the classic presentation of steroid-associated osteonecrosis.[1]

78. Dr. Beaver also testified that as part of his differential diagnosis, or differential etiology, he relied on his own treatment of Plaintiff and his own operative findings made during Plaintiff's total knee replacement surgery as bases for his conclusion that trauma from the automobile accident more

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[1]Dr. Beaver testified that the following excerpt from a medical treatise, which Dr. Beaver acknowledged as authoritative and read into evidence on direct examination, accurately describes the classic presentation of steroid-associated osteonecrosis:

> Steroid-associated osteonecrosis occurs primarily in patients younger than [forty-five] years of age. Women are three to four times more likely to be affected by the disease than men. Patients commonly have an immunocompromising disorder such as systemic lupus erythematosus. . . . Patients have a gradual onset of pain that is localized over the medial or lateral condyle, with knee examination otherwise unremarkable. The process is bilateral approximately [eighty] percent of the time and about [ninety] percent of patients have associated hip osteonecrosis involvement. The lesions are typically found on both tibial and femoral condyles and are larger relative to the areas observed in spontaneous osteonecrosis of the knee. A corticosteroid association is common, but is not the only risk factor. Patients with a history of alcoholism, Caisson's decompression disease, Gaucher's disease, trauma, arthroscopic meniscectomy and those who have undergone anterior cruciate ligament reconstruction are at increased risk of the disease.

(Tr. at 33-34.)

likely than not caused osteonecrosis to develop in Plaintiff's right knee.

79. Dr. Beaver also testified that the rate at which osteonecrosis develops depends on the type of osteonecrosis involved. (Id. at 61-62.) Dr. Beaver explained that osteonecrosis related to a femoral neck fracture in the hip usually takes between eighteen months and two years to develop while steroid-associated osteonecrosis can progress from stage one osteonecrosis to stage four osteonecrosis in as little as six months. (Id.) According to Dr. Beaver's testimony, the characteristics of stage one osteonecrosis are only physical pain and a positive MRI result, and stage four osteonecrosis is characterized by total joint collapse and degeneration of joint cartilage. (Id. at 61-62.)

80. Dr. Beaver also testified that several x-rays of Plaintiff's right knee, which were taken on April 4, 2000, and on June 28, 2000, did not show any bony abnormality in Plaintiff's right knee and otherwise appeared normal. According to Dr. Beaver's testimony, those x-rays of Plaintiff's right knee would have appeared abnormal if osteonecrosis had existed in Plaintiff's knee for three years before the automobile accident. (Id.)

81. Dr. Beaver also testified that based on the x-rays of Plaintiff's right knee, which were taken on April 4, 2000, and

June 28, 2000, Plaintiff had stage one osteonecrosis at the time of her MRI in July 2000. (Id. at 62.) According to Dr. Beaver's testimony, osteonecrosis is not visible on an x-ray until it progresses from stage one to stage two. (Id.)

82. Dr. Beaver also testified that when he performed the total knee replacement of Plaintiff's right knee on August 23, 2000, Plaintiff's knee joint looked normal, which is consistent with the early stages of osteonecrosis. (Id. at 40.)

83. Dr. Beaver also testified that his operative findings were consistent with recent trauma from the automobile accident on April 4, 2000. (Id.) According to Dr. Beaver's testimony, when he performed the total knee replacement of Plaintiff's right knee on August 23, 2000, "[Plaintiff] was certainly far enough down the road for any soft tissue injury, bruising, swelling, whatever, to have subsided just by -- from time alone at that juncture." (Id.)

84. Dr. Beaver also testified that he did not base his opinion on any information regarding Plaintiff's complaints of knee pain during 1997 and 1998 other than a record from his office, which showed that he had seen Plaintiff about a knee problem on one prior occasion. When asked whether it would be significant if Plaintiff had sought treatment for her right knee prior to the automobile accident, Dr. Beaver responded, "Sure, that would be significant." (Id. at 65.)

85. Dr. Beaver testified that he did not base his opinion on any medical treatment Plaintiff had received from other physicians prior to the accident, including medical treatment that Plaintiff had received from physicians at Mount Pleasant and from Dr. Senter. (Id. at 66, 68.) When asked whether it would be significant if Plaintiff had received oral steroids prior to the automobile accident, Dr. Beaver responded, "Yes, it would have been significant." (Id. at 68.)

86. Dr. Samuel A. Sue, Jr., testified as an expert witness for Defendant. Plaintiff stipulated at trial that Dr. Sue qualified as a medical expert.

87. Dr. Sue based his trial testimony on his knowledge, education, training, and experience. Dr. Sue also based his testimony on a review of Plaintiff's medical records, which included Plaintiff's medical records from Dr. Beaver's office at Northeast Orthopedics, Dr. Senter's office, Mount Pleasant, Rowan Regional Medical Center, and Northeast Medical Center. (Id. at 84.) At trial, Dr. Sue stated all of his opinions in terms of a reasonable degree of medical certainty. (Id. at 84-85.)

88. Dr. Sue testified that the medical community does not know the exact cause of osteonecrosis; however, Dr. Sue explained that "it's commonly accepted that the final common pathway for development of osteonecrosis is that of compromising the blood supply to the [bone]." (Id. at 85.)

89. Dr. Sue also testified that primary osteonecrosis is a type of osteonecrosis that occurs in cases where there is no apparent cause and medical science does not know why it occurs. (Id. at 85-86.) According to Dr. Sue's testimony, primary osteonecrosis is synonymous with spontaneous osteonecrosis and idiopathic osteonecrosis. (Id.)

90. Dr. Sue also testified that secondary osteonecrosis is "[a] type [of osteonecrosis] that comes from a disease process that's being treated like connective tissue disease. . . . And the prolonged use of steroids causes osteonecrosis." (Id. at 87.) According to Dr. Sue's testimony, secondary osteonecrosis may arise from the treatment of connective tissue disorders with steroids. (Id.)

91. Dr. Sue also testified that in his opinion it was more likely than not that the osteonecrosis in Plaintiff's right knee existed prior to the automobile accident. According to Dr. Sue's testimony, "[Plaintiff] was having symptoms from this knee back in 1997, and I think that was the start of the osteonecrosis, and I do not think that the accident was severe enough to damage her blood supply to the knee to initiate an osteonecrosis." (Id. at 98.) Dr. Sue classified the osteonecrosis in Plaintiff's right knee as spontaneous osteonecrosis. (Id. at 102.)

92. Dr. Sue also testified that the multiple cortisone or steroid treatments that Plaintiff had received between 1994 and

2000 aggravated the osteonecrosis in her right knee. (Id. at 99.) According to Dr. Sue's testimony, "the osteonecrosis developed back from '97 when [Plaintiff] was having the frequent attacks with her right knee, and I think that the steroids with their cumulative effect and with the frequency of use, aggravated the onset [of Plaintiff's osteonecrosis]." (Id. at 100.)

93. Dr. Sue also testified that the automobile accident on April 4, 2000, had no effect on the osteonecrosis in Plaintiff's right knee because Plaintiff did not experience enough trauma to her right knee to cause an interruption of the blood supply to the bone in her right knee. (Id. at 102.)

94. Dr. Sue also testified that an MRI is the only good way to diagnose osteonecrosis because osteonecrosis does not show up on x-rays during its early stages of development. (Id. at 91.) According to Dr. Sue's testimony, stage two osteonecrosis and stage three osteonecrosis may or may not show up on an x-ray, and "in some cases . . . [osteonecrosis] won't show up . . . until it gets to stage four, and then the [x]-ray will show the destructive changes that are going on in the joint, since that lesion has now broken through the lower end of the thigh bone and is in the joint and causing destructive changes in the joint." (Id. at 207.)

95. Dr. Sue also testified that Plaintiff's MRI results from July 15, 2000, showed a stage three necrotic lesion about

one inch by three-eighths of one inch in width on the back part of Plaintiff's right femoral condyle, which had not yet broken through Plaintiff's subcondyle bone into the joint space of Plaintiff's right knee. (Id. at 95-96.) According to Dr. Sue's testimony, the stage three necrotic lesion in Plaintiff's right knee would have taken between one year and four years to develop. (Id. at 211.)

96. Dr. Sue also testified that osteonecrosis may become quiescent or inactive for a period of time. According to Dr. Sue's testimony, "[osteonecrosis] can abate or become quiescent. And when it's that way, it doesn't cause symptoms, so [Plaintiff] may have had a period between the '97 instance and her accident when it was quiescent or not active." (Id. at 128.)

97. Dr. Sue also testified that Plaintiff's medical records showed that Plaintiff had last complained of knee pain and had last sought medical treatment for knee pain on August 28, 1998--nearly two years prior to the automobile accident. (Id. at 201.)

98. Dr. Sue also testified that several medical treatises, which Dr. Sue recognized as authoritative, suggested that minor injury trauma or a minor unrecognized traumatic insult could cause osteonecrosis. (See id. at 161-74.) According to Dr. Sue's testimony, a minor unrecognized insult "must

be . . . even less than a traumatic event than what [Plaintiff] had." (Id. at 173.)

99. Dr. Sue also testified that several medical treatises, which Dr. Sue recognized as authoritative, suggested that osteonecrosis may result from microfractures in a bone caused by minor trauma; however, Dr. Sue stated that he did not believe in the microfracture theory of osteonecrosis. (See id. at 161-74.)

100. Dr. Sue also testified that microfractures occur in a variety of ways. (Id. at 220.) According to Dr. Sue's testimony, a normal person can develop microfractures as a result of performing a basic activity such as walking. (Id.)

101. Dr. Sue also testified that Plaintiff's medical records from Dr. Beaver's office did not contain any comments from Dr. Beaver regarding what Dr. Beaver actually saw in Plaintiff's knee joint during surgery. According to Dr. Sue's testimony, an x-ray is not the equivalent of looking at a joint with the naked eye, and "[he] wanted to know what it looked like when [Dr. Beaver] opened the knee." (Id. at 107.)

102. Dr. Sue also testified that a person's treating physician is in the best position to give an opinion regarding the onset and development of osteonecrosis.

103. Dr. Sue also testified that a physician who saw the inside of a person's knee during surgery would be in a better

position to give an opinion regarding the progression of osteonecrosis. (Id. at 194.)

104. Dr. Beaver and Dr. Sue both agreed that trauma can cause osteonecrosis; however, Dr. Beaver and Dr. Sue disagreed on the amount of trauma required to cause osteonecrosis.

105. Dr. Beaver and Dr. Sue both agreed that Plaintiff did suffer some trauma to her right knee during the automobile accident on April 4, 2000.

106. Dr. Beaver and Dr. Sue both agreed that the sudden onset of pain and tenderness over a joint that grows worse over time is consistent with the development and progression of osteonecrosis.

107. Dr. Beaver and Dr. Sue both agreed that Plaintiff had experienced no knee pain for nearly two years prior to the automobile accident.

108. Dr. Beaver and Dr. Sue both agreed that Plaintiff had experienced pain in her right knee after the automobile accident, which grew progressively worse until Dr. Beaver diagnosed Plaintiff with osteonecrosis in July 2000 and performed the total knee replacement of Plaintiff's right knee in August 2000.

109. Dr. Beaver and Dr. Sue both agreed that orthopedic surgeons commonly use a differential diagnosis, or differential etiology, in order to determine the most probable cause of a person's injury or medical condition.

110. Dr. Beaver and Dr. Sue both agreed that fibromyalgia, bursitis, hypertension, and poor health in general did not cause Plaintiff's osteonecrosis.

111. Dr. Beaver and Dr. Sue both agreed that the multiple cortisone or steroid treatments that Plaintiff had received between 1994 and 2000 did not cause Plaintiff's osteonecrosis.

DISCUSSION

"In this federal tort claims action, arising out of events occurring in North Carolina, the law of that state controls." Iodice v. United States, 289 F.3d 270, 274-75 (4th Cir. 2002) (citing F.D.I.C. v. Meyer, 510 U.S. 471, 478 (1994)). See also 28 U.S.C. §§ 1346(b)(1) and 2674. In order to establish a prima facie case of negligence under North Carolina law, "[a] plaintiff must offer evidence that [the] defendant owed him [or her] a duty of care, that [the] defendant breached that duty, and that [the] defendant's breach was the actual and proximate cause of [the] plaintiff's injury." Cowan v. Laughridge Constr. Co., 57 N.C. App. 321, 324-25, 291 S.E.2d 287, 289 (1982)(citing Burr v. Everhart, 246 N.C. 327, 98 S.E.2d 327 (1957)). A plaintiff also must establish that he or she suffered damages as a result of his or her injury in order to support his or her negligence

claim. See Lamm v. Bissette Realty, Inc., 327 N.C. 412, 416, 395 S.E.2d 112, 115 (1990) (citation omitted).

In the instant case, the parties filed a number of pre-trial stipulations, which included Defendant's stipulation that Tinker breached a duty of care owed to Plaintiff while acting within the scope of his employment with Defendant as a recruiter for the Department of the Army. (See Trial Stipulations at 2-3.) Defendant's admission of Tinker's negligence is not sufficient to impose tort liability upon Defendant without a finding that Tinker's negligence proximately caused Plaintiff's injuries. See Shumaker v. United States, 714 F. Supp. 154, 161 (M.D.N.C. 1988) ("Proof of negligence is not sufficient to impose liability absent a showing that a defendant's breach of duty proximately caused the [p]laintiff's injuries."). Therefore, as the finder of fact in the instant case, the court must determine whether Tinker's negligence actually and proximately caused osteonecrosis to develop in Plaintiff's knee, and what amount of personal injury damages, if any, Plaintiff is entitled to recover from Defendant as a result of Tinker's negligence.

"The law of negligence requires the plaintiff to prove by a preponderance of the evidence that a defendant's breach of duty caused the plaintiff's injury." Hurley v. United States, 923 F.2d 1091, 1094 (4th Cir. 1991) (citations omitted). See also Shadkhoo v. Shilo East Farms, Inc., 328 N.C. 47, 51, 399 S.E.2d

319, 321 (1991) ("Before the plaintiff can be entitled to a verdict he [or she] must satisfy the [fact finder] by the preponderance of the evidence that the injuries complained of were proximately caused by the negligence of the defendant.") (citing Young v. Anchor Co., 239 N.C. 288, 291, 79 S.E.2d 785, 788 (1954)). "The burden of showing something by a 'preponderance of the evidence' . . . 'simply requires the trier of fact "to believe that the existence of a fact is more probable than its nonexistence before [he] may find in favor of the party who has the burden to persuade the [judge] of the fact's existence."'" Concrete Pipe and Prods. of Cal., Inc. v. Constr. Laborers Pension Trust for Southern Cal., 508 U.S. 602, 622 (1993) (quoting In re Winship, 397 U.S. 358, 371-72 (1970) (Harlan, J. concurring) (alterations in original)). "In other words, the plaintiff must prove the defendant's breach of duty was more likely than not (i.e., probably) the cause of injury." Hurley, 923 F.2d at 1094 (citation omitted).

The North Carolina Supreme Court has defined proximate cause as "a cause that produced the result in continuous sequence and without which it would not have occurred, and one from which any man of ordinary prudence could have foreseen that such a result was probable under all the facts as they existed.'" Shumaker, 714 F. Supp. at 162 (quoting Nance v. Parks, 266 N.C. 206, 209, 146 S.E.2d 24, 27 (1966), as quoted in Wall v. Stout, 310 N.C.

184, 201, 311 S.E.2d 571, 581 (1984)). An injured plaintiff is generally entitled to recover all damages proximately caused by the defendant's negligence; however, "when [the plaintiff's] injuries are aggravated or activated by a pre-existing physical or mental condition, [the] defendant is liable only to the extent that his wrongful act proximately and naturally aggravated or activated [the] plaintiff's condition. 'The defendant is not liable for damages . . . attributable solely to the original condition.'" Lee v. Regan, 47 N.C. App. 544, 550-51, 267 S.E.2d 909, 913 (1980) (quoting Potts v. Howser, 274 N.C. 49, 54, 161 S.E.2d 737, 742 (1968)). Expert medical testimony is generally required to show that the defendant's negligence more likely than not caused the plaintiff's injury in negligence cases where the claimed injury is complicated or unusual. See Driggers v. Sofamor, S.N.C., 44 F. Supp. 2d 760, 765 (M.D.N.C. 1998) ("'[W]here the exact nature and probable genesis of a particular type of injury involves complicated medical questions far removed from the ordinary experience and knowledge of laymen, only an expert can give competent opinion evidence as to the cause of the injury.'") (quoting Click v. Pilot Freight Carriers, Inc., 300 N.C. 164, 167, 265 S.E.2d 389, 391 (1980)).

Expert testimony is admissible under Federal Rule of Evidence 702 if it "rests on a reliable foundation and is relevant." Westberry v. Gislaved Gummi AB, 178 F.3d 257, 260-61

(4th Cir. 1999) (citing Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137 (1999)).[2] Moreover, the opinion testimony of the medical expert may not be stated in general terms but must be stated in terms of a reasonable degree of medical certainty in order to qualify as evidence of causation. See Driggers, 44 F. Supp. 2d at 765 (quoting Fitzgerald v. Manning, 679 F.2d 341, 350 (4th Cir. 1982)). In the instant case, both Dr. Beaver and Dr. Sue gave competent and relevant expert medical testimony and stated their expert medical opinions in terms of a reasonable degree of medical certainty regarding the actual and proximate cause of osteonecrosis in Plaintiff's right knee.

Dr. Beaver testified that he used a differential diagnosis, or differential etiology, to reach his conclusion that trauma from the automobile accident more likely than not caused osteonecrosis to develop in Plaintiff's right knee. According to the Fourth Circuit, "[a] reliable differential diagnosis provides a valid foundation for an expert opinion." Westberry, 178 F.3d

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[2]Federal Rule of Evidence 702 provides as follows:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

at 263. "Differential diagnosis, or differential etiology, is a standard scientific technique of identifying the cause of a medical problem by eliminating the likely causes until the most probable one is isolated." Id. at 262 (citing Baker v. Dalkon Shield Claimants Trust, 156 F.3d 248, 252-53 (1st Cir. 1998)). "A reliable differential diagnosis typically, though not invariably, 'is performed after physical examinations, the taking of medical histories, and the review of clinical tests, including laboratory tests.'" Cooper v. Smith & Nephew, Inc., 259 F.3d 194, 200 (4th Cir. 2001) (citing Westberry, 178 F.3d at 262). "This technique 'has widespread acceptance in the medical community, has been subject to peer review, and does not frequently lead to incorrect results.'" Westberry, 178 F.3d at 262 (quoting Brown v. Southeastern Penn. Transp. Auth. (In re Paoli R.R. Yard PCB Litig.), 35 F.3d 717, 758 (3d Cir. 1994)).

Dr. Sue classified the osteonecrosis in Plaintiff's right knee as spontaneous osteonecrosis. Although Dr. Sue could not determine the exact cause of Plaintiff's osteonecrosis, Dr. Sue testified that in his opinion Plaintiff's osteonecrosis probably existed prior to the automobile accident on April 4, 2000, and that the cortisone or steroid treatments Plaintiff had received between 1994 and 2000 probably aggravated the osteonecrosis in Plaintiff's right knee. Dr. Sue also testified that the

automobile accident had no effect on Plaintiff's pre-existing knee condition.

The differences between Dr. Beaver's expert medical opinions and Dr. Sue's expert medical opinions raise an issue regarding the weight of each expert's testimony, which is an issue the court must resolve as the finder of fact in the instant case. See id. at 265 (stating that alternative causes suggested by a defendant affect the weight that the fact finder should give the expert's testimony and not the admissibility of that expert's testimony unless the expert can offer no explanation as to why he or she concluded that an alternative cause offered by the opposing party was not the sole cause of an injury) (citations omitted); see also Owens by Owens v. Bourns, Inc., 766 F.2d 145, 148, n.5 (4th Cir.) (noting that where competing experts describe general medical theories concerning the etiology of a plaintiff's medical condition in a different manner, "[the] differences in [their] medical testimony raise issues of the weight of expert testimony properly left for the [finder of fact]"), cert. denied, 474 U.S. 1038 (1985); and Smith v. Wyeth-Ayerst Labs. Co., 278 F. Supp. 2d 684, 692 (W.D.N.C. 2003) (concluding that the possibility that a medical condition can occur spontaneously or idiopathically does not render an expert's opinion on the cause of that condition unreliable or inadmissible but instead goes to the weight of the evidence).

After a careful review of Dr. Beaver's testimony and Dr. Sue's testimony, the court believes that Dr. Beaver's testimony provides a reasonable basis for the court to conclude that Plaintiff would not have developed osteonecrosis in her right knee but for Tinker's negligence. See Liller v. Quick Stop Food Mart, Inc., 131 N.C. App. 619, 624, 507 S.E.2d 602, 606 (1998) ("To establish that negligence was a proximate cause of the injury suffered, a plaintiff must establish that the injury would not have occurred but for the defendant's negligence.") (citing Rorrer v. Cooke, 313 N.C. 338, 361, 329 S.E.2d 355, 369 (1985)). Dr. Beaver described osteonecrosis in the knee as a "rare bird" and conceded that the medical community does not always definitively know what causes osteonecrosis in the knee; however, Dr. Beaver and Dr. Sue both agreed that the medical community does recognize trauma as one potential cause of osteonecrosis. According to Dr. Beaver's testimony, any amount of trauma to the knee that causes a microfracture in the bone, or a microvascular compromise of blood circulation to the bone, can cause osteonecrosis to occur in the knee because osteonecrosis occurs on a microvascular level. Although Dr. Sue disagreed with Dr. Beaver's opinion regarding the etiology of Plaintiff's osteonecrosis, several authoritative medical treatises presented as evidence at trial endorse this so-called microfracture theory of osteonecrosis, which Dr. Beaver relied on to conclude that

trauma from the automobile accident probably caused Plaintiff's osteonecrosis.

Although Dr. Sue testified on direct examination that Plaintiff's osteonecrosis probably existed prior to the automobile accident, Dr. Sue conceded on cross-examination that a person's treating physician is in the best position to give an opinion regarding the onset and development of osteonecrosis. Dr. Sue also conceded on cross-examination that a physician who observed the inside of a person's knee during surgery would be in a better position to give an opinion regarding the progression of that person's osteonecrosis after Dr. Sue testified on direct examination that the MRI of Plaintiff's right knee taken on July 15, 2000, showed a stage three necrotic lesion on the back part of Plaintiff's right femoral condyle. According to Dr. Sue's testimony, it would have been helpful to know what Plaintiff's knee joint looked like when Dr. Beaver opened it during surgery on August 23, 2000, and Plaintiff's medical records did not provide any record of what Dr. Beaver saw inside of Plaintiff's knee joint during surgery.[3]

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[3]The Fourth Circuit has previously held that the medical opinion of a claimant's treating physician is entitled to great weight in the context of claims for disability benefits under the Social Security Act, see Coffman v. Bowen, 829 F.2d 514, 517 (4th Cir. 1987); Foster v. Heckler, 780 F.2d 1125, 1130 (4th Cir. 1986); Mitchell v. Schweiker, 699 F.2d 185, 187 (4th Cir. 1983); Oppenheim v. Finch, 495 F.2d 396, 398 (4th Cir. 1974); and Vitek v. Finch, 438 F.2d 1157 (4th Cir. 1971); however, the Fourth

(continued...)

Based on Dr. Sue's own testimony on cross-examination and all of the evidence presented at trial, the court finds that Dr. Beaver's medical opinions presented as evidence at trial are entitled to greater weight because Dr. Beaver was one of Plaintiff's treating physicians both before and after the automobile accident on April 4, 2000. The court also believes that Dr. Beaver's medical opinions are entitled to greater weight because Dr. Beaver actually observed Plaintiff's right knee joint during Plaintiff's total knee replacement surgery. According to Dr. Beaver's testimony, Plaintiff's right knee joint looked normal during surgery, which is consistent with the early stages of osteonecrosis. Dr. Beaver's testimony regarding the appearance of Plaintiff's right knee during surgery is consistent with his conclusion that Plaintiff's osteonecrosis had not progressed beyond stage one as of July 2000.

Dr. Beaver's testimony that Plaintiff's knee joint appeared normal during surgery also supports Plaintiff's theory that relatively minor trauma from the automobile accident caused osteonecrosis to develop in her right knee. Based on all of the evidence presented at trial, the court is persuaded that Tinker's negligence and the trauma from the automobile accident on

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[3](...continued)
Circuit has not yet applied this so-called treating physician rule in the context of negligence claims against the United States under the Federal Tort Claims Act.

April 4, 2000, probably caused osteonecrosis to develop in Plaintiff's right knee after the automobile accident and led to Plaintiff's total knee replacement on August 23, 2000. Therefore, the court will conclude that Plaintiff has produced sufficient evidence to satisfy her burden of proof on the issue of causation.

Under the FTCA, the court must award damages according to the law of the state where the complained-of act or omission occurred. In re Air Crash Disaster at Charlotte, North Carolina on July 2, 1994, 982 F. Supp. 1101, 1111 (D.S.C. 1997) (citing Richards v. United States, 369 U.S. 1 (1962)). When a plaintiff suffers personal injuries in North Carolina as a result of a defendant's negligence, "'the plaintiff [is] entitled to recover the present worth of all damages naturally and proximately resulting from [the] defendant's tort.'" Brown v. Neal, 283 N.C. 604, 610-11, 197 S.E.2d 505, 509 (1973) (quoting King v. Britt, 267 N.C. 594, 148 S.E.2d 594 (1966)). "Specifically, under North Carolina law, a personal injury plaintiff may recover damages for pecuniary loss and expenses, loss or diminution of earnings during incapacity, impairment of future earning capacity, and pain and suffering, including mental suffering." In re Air Crash Disaster, 982 F. Supp. at 1111 (citing United States v. Brooks, 176 F.2d 482, 483-84 (4th Cir. 1949)). A plaintiff is entitled to prospective damages "'where there is sufficient evidence of

pain, disability or other injury continuing into the future to justify consideration thereof [by the finder of fact].'" Horne v. Roadway Package Sys., Inc., 129 N.C. App. 242, 245, 497 S.E.2d 436, 438 (1998) (quoting Goble v. Helms, 64 N.C. App. 439, 448, 307 S.E.2d 807, 813 (1983), disc. review denied, 310 N.C. 625, 315 S.E.2d 690 (1984)).

North Carolina courts have recognized that the damage awards should restore injured persons as nearly as possible to the position they would have been in but for the defendant's negligence. In re Air Crash Disaster, 982 F. Supp. at 1112 (citing Jacobs v. Central Transport, Inc., 891 F. Supp. 1120 (E.D.N.C. 1995)). "[C]ompensatory damage awards should be 'proportional to the actual injury incurred' and 'must focus on the real injury sustained.'" Id. at 1111 (citing Hetzel v. County of Prince William, 89 F.3d 169, 173 (4th Cir.), cert. denied, 519 U.S. 1028 (1996)). In the instant case, both parties agree that Plaintiff's past and present medical expenses total $29,687.37. Therefore, the court will award Plaintiff damages in the amount of $29,687.37 as fair and reasonable compensation for past and present medical expenses incurred as a result of Tinker's negligence and the trauma from the automobile accident on April 4, 2000.

Plaintiff also introduced evidence at trial that a total knee replacement typically requires either revision or

resurfacing, or both, within fifteen-to-twenty years after the date of the original total knee replacement, and Dr. Sue agreed that a total knee replacement will last fifteen-to-twenty years depending on how much stress is placed on it during its lifetime. Plaintiff had a life expectancy of 28.5 years on August 23, 2000, which is the date that Dr. Beaver first performed the total knee replacement of Plaintiff's right knee, and on April 12, 2001, which is the date that Dr. Beaver last performed a knee revision of Plaintiff's right knee. See N.C. Gen. Stat. § 8-46. Plaintiff did not present any evidence as to the specific costs associated with the revision and resurfacing of a total knee replacement. "In proving damages, 'absolute certainty is not required but evidence of damages must be sufficiently specific and complete to permit the [fact finder] to arrive at a reasonable conclusion." Fortune v. First Union Nat'l Bank, 323 N.C. 146, 150, 371 S.E.2d 483, 485 (1988) (citations omitted).

A plaintiff who is injured by a defendant's negligence is entitled to reasonable compensation for permanent injuries, for scarring and disfigurement, and for physical and mental pain and suffering under North Carolina law. See King, 267 N.C. at 597, 148 S.E.2d at 597-98 (stating that in cases where a plaintiff is injured by a defendant's negligence, the plaintiff is entitled to recover "a reasonable satisfaction for actual suffering, physical and mental, which are the immediate and necessary consequences of

the injury"); see also Gillikin v. Burbage, 263 N.C. 317, 326, 139 S.E.2d 753, 760 (1965) (recognizing that damages for personal injury also include fair compensation for permanent injuries as long as "there is some evidence tending to establish one with reasonable certainty"). When awarding damages in a personal injury action, the fact finder's ultimate task is to somehow assign a monetary value to the injured party's intangible losses attributable to pain, suffering, disfigurement and disablement, and arrive at a lump sum amount, which is supported by the evidence and is fair and just to both the plaintiff and the defendant. See Weeks v. Holsclaw, 306 N.C. 655, 661-63, 295 S.E.2d 596, 600-01 (1982). Based on all of the evidence presented at trial, including Plaintiff's own testimony and Dr. Beaver's expert medical testimony regarding Plaintiffs' capabilities before and after her total knee replacement surgery, the court will award Plaintiff compensatory damages in the amount of $60,000.00 as fair and reasonable compensation for past, present, and future pain and suffering, for scarring and disfigurement, and for the permanent impairment of her right knee as a result of Tinker's negligence and the trauma from the automobile accident on April 4, 2000.

Based on the foregoing Findings of Fact, the court makes the following:

CONCLUSIONS OF LAW

1. The court has exclusive jurisdiction of this civil action pursuant to 28 U.S.C. § 1346(b)(1).

2. On April 4, 2000, Tinker negligently operated a 1998 Ford Contour owned by Defendant with Defendant's consent and permission, and Tinker negligently operated the automobile at all times relevant to this action within the scope of his employment with Defendant as a recruiter for the Department of the Army.

3. At approximately 9:06 a.m. on April 4, 2000, Tinker failed to stop for a red traffic light at the intersection of Cabarrus Avenue and Highway 136 and collided with Plaintiff's 1991 Nissan Sentra in the intersection as Plaintiff traveled east on Cabarrus Avenue. The impact from the collision caused Plaintiff to strike her knees on either the steering column or the dashboard, or both.

4. Dr. Beaver, Plaintiff's treating physician, based his expert testimony on medical science as well as on his own specialized knowledge, skill, and medical training. Dr. Beaver's expert testimony assisted the court in understanding all of the evidence presented at trial and aided the court in determining the actual and proximate cause of Plaintiff's osteonecrosis. Because Dr. Beaver's expert testimony was relevant and rested on

a reliable foundation, it satisfies the evidentiary requirements for admissibility under Rule 702.

5. Plaintiff has proven by a preponderance of the evidence through Dr. Beaver's expert testimony that Tinker's negligence and the trauma from the automobile accident on April 4, 2000, actually and proximately caused Plaintiff to develop osteonecrosis in her right knee and led to Plaintiff's total knee replacement surgery on August 23, 2000.

6. Plaintiff is entitled to recover damages in the amount of $29,687.37 as fair and reasonable compensation for past and present medical expenses incurred as a result of Tinker's negligence and the automobile accident on April 4, 2000.

7. Plaintiff is entitled to recover damages in the amount of $60,000.00 as fair and reasonable compensation for past, present, and future pain and suffering, for scarring and disfigurement, and for the permanent impairment of her right knee as a result of Tinker's negligence and the trauma from the automobile accident on April 4, 2000.

9. For the foregoing reasons, Plaintiff is entitled to a judgment against Defendant for compensatory damages in the amount of $89,687.37.

An order and judgment in accordance with this memorandum opinion shall be entered contemporaneously herewith.

United States District Judge

May 19, 2004